CITY OF
NORTH LAS VEGAS
Your Community of Choice

Utilities Department
2829 Ft Sumter
North Las Vegas, Nevada
89030

water quality report 2004

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Pictured left to right: Councilmember Robert L. Eliason, Councilmember Shari Buck, Mayor Michael L. Montandon, Councilmember Stephanie S. Smith, and Councilmember-Mayor Pro Tempore William E. Robinson

Gregory E. Rose
City Manager

David H. Bereskin
Director of Utilities

2829 Fort Sumter Drive. · North Las Vegas, Nevada 89030 · (702) 633-1484
www.cityofnorthlasvegas.com

ADA ACCOMMODATIONS (702) 633-1510 TDD (800) 326-6868

Letter to our Water Customers

Mayor
Michael L. Montandon

Council Members
William E. Robinson
Stephanie S. Smith
Shari Buck
Robert L. Eliason

City Manager
Gregory E. Rose

Assistant City Manager
Dan Tarwater

CITY OF NORTH LAS VEGAS
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Utilities Department
2829 Ft Sumter • North Las Vegas, Nevada 89030
Telephone: (702) 633-1275 • Fax: (702) 649-9784 • TDD: (800) 326-6868
www.cityofnorthlasvegas.com

Dear Water Customer,

Every year we are pleased to provide the Water Quality Report to the citizens of North Las Vegas. The purpose of this report is to provide essential details about the quality and source of our drinking water. We reassure you that our water meets both state and federal drinking water quality regulations.

Water in Southern Nevada is limited and mandatory conservation measures must be taken seriously. We want you to understand the process that it takes for high quality water to reach your homes and businesses. Knowledgeable citizens are more likely to protect their drinking water and follow safety guidelines regarding our water system.

We want to keep you informed about the quality of our water. Please take a few minutes to review the content in this report and you will definitely feel more confident about the safety of our drinking water.

Sincerly yours,

David H. Bereskin, P.E.
Director of Utilities

Definitions

Action level (AL) - The concentration of a contaminant which, if exceeded triggers a treatment or other requirement which a water system must follow.

AMSWTF - Alfred Merritt Smith Water Treatment Facility

Disinfection by-product - A substance created by the chemicals or processes used to destroy potentially harmful microorganisms.

Inorganic compounds (IOCs) - Typically associated with the natural deposits, fertilizers, septic systems and asbestos components in the water distribution system.

Maximum contaminant level (MCL) - The highest level of a contaminant allowed in drinking water. MCLs are set as close to the maximum contaminant level goal as feasible using the best-available treatment technology.

Maximum contaminant level goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum residual disinfectant level (MRDL) - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum residual disinfectant level goal (MRDLG) - The level of a drinking- water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microorganisms.

N/A - Not applicable

N/D - Not detected.

Nephelometic Turbidity Unit (NTU) - A measurement of water's clarity.

Picocuries per liter (pCi/L) - A measure of the radioactivity in water. Low levels of radiation occur naturally in many water systems.

ppb (parts per billion) - A unit used to describe the levels of detection contaminants. Equivalent to about 1 cent in $1,000,000.00.

ppm (parts per million) - A unit used to describe the levels of detection contaminants. Equivalent to about 1 cent in $10,000.00.

Radionuclides - Are typically associated with erosion of natural deposits and industrial activities.

RMWTF - River Mountain Water Treatment Facility.

SNWA - Southern Nevada Water Authority.

Synthetic Organic Compounds (SOCs) - Typically associated with herbicides and insecticides.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Turbidity - A measure of water clarity, which serves as an indicator of the treatment facility's performance.

Volatile Organic Compounds (VOCs) – Typically associated with gas stations and dry cleaning chemicals.

Table of Contents

SNWA has partnered with local companies to create the Water Smart Car Wash program. Many participating companies are offering coupons. Check www.snwa.com to find a Water Smart Car Wash near you.

This Water Quality Report is published in accordance with the Federal Safe Drinking Water Act, which establishes drinking water standards and requires purveyors to provide water quality information to their customers.

The City of North Las Vegas believes it is essential that our customers know all the facts about Southern Nevada's drinking water. This report, which is issued every year, includes test results, a source water analysis, an overview of the treatment process and other valuable information relating to the quality of our municipal water supply.

If you have any questions or concerns relating to this report, please call 633-1484, Monday through Thursday 7 a.m. to 5 p.m.

CNLV Source Water

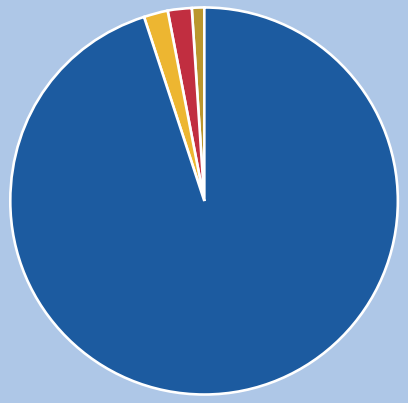
Most of our drinking water comes from Lake Mead. Of that water, about 97 percent is from the Colorado River, which is one of the nation's highest quality sources of drinking water. The Las Vegas Wash, which carries flood water and treated wastewater, accounts for only 1.45 percent of all the water in Lake Mead. Ground water is also blended with treated water from the lake to meet customer demands.

Source: Lake Mead
Inflows:
Colorado River
Las Vegas Wash
Virgin River
Muddy River

Potential Sources of Contamination:
Urban activities (fertilizers, pesticides, etc.)
Industrial activities
Wildlife activities

Source: Las Vegas Ground Water Aquifer
Inflows:
Spring Mountain recharge, Sheep Range recharge
Artificial recharge (treated Lake Mead water)

Potential Sources of Contamination:
Landfills, Domestic septic systems



- Colorado River.....97.08%
- Las Vegas Wash.....1.45%
- Virgin River.....1.35%
- Muddy River.....0.10%

MICROBIOLOGICAL ANALYSES

			MCL	MCLG
Total Coliforms	Highest monthly % positive Average monthly % positive	0% 0%	5%*	0
Total number E. coli-positive samples	0	NA	NA	

* No more than 5.0% samples total coliform positive in a month. Every sample that has total coliform must be analyzed for either fecal coliforms or E. coli and must be immediately followed with collection of three additional samples. If there are two consecutive total coliform positive samples and one is also positive for fecal coliforms or E. coli, the system has an acute MCL violation.

TEST RESULTS (These results represent levels in the treated water supply, based on 2004 data)

SUBSTANCE	MINIMUM	MAXIMUM	AVERAGE	MCL	MCLG	POSSIBLE SOURCES
Arsenic	N/D	2 ppb	0.5 ppb	50 ppb[1]	0 ppb	Erosion of natural deposits
Barium	130 ppb	150 ppb	145 ppb	2000 ppb	2000 ppb	Erosion of natural deposits; discharge from metal refineries; discharge of drilling wastes
Bromate Alfred Merritt Smith WTF	N/D	6.4 ppb	3 ppb[2]	10 ppb	0 ppb	By-product of drinking-water disinfection
Bromate River Mountains WTF	N/D	9.3 ppb	3 ppb[2]	10 ppb	0 ppb	By-product of drinking-water disinfection
Chromium (Total)	N/D	2.0 ppb	0.5 ppb	100 ppb	100 ppb	Erosion of natural deposits
Fluoride	170 ppb	840 ppb	749 ppb	4,000 ppb	4,000 ppb	Erosion of natural deposits; water additive[8]
2,4-D	N/D	0.46 ppb	0.23 ppb	70 ppb	70 ppb	Runoff from herbicide
Nitrate (as N)	410 ppb	520 ppb	450 ppb	10,000 ppb	10,000 ppb	Runoff from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium	N/D	2 ppb	0.5 ppb	50 ppb	50 ppb	Discharge from petroleum refineries; erosion of natural deposites; discharge from mines
Free Chlorine Residual	0.12 ppb	1.86 ppb	0.98 ppb[2]	4.0 ppb[3]	4.0 ppb[3]	Water additive used to control microbes
Lead	N/D	8 ppb	4 ppb (90th% Value)	15 ppb[4]	0 ppb	Corrosion of household plumbing systems
Copper	N/D	1321 ppb	988 ppb (90th% Value)	1300 ppb[4]	1300 ppb	Corrosion of household plumbing systems; erosion of natural deposites; leaching from wood preservatives
Total Coliforms	Less than 1% Positive	Less than 1% Positive	Less than 1% Positive	5% Positive	0% Positive	Naturally present in the environment
Total Trihalomethanes	N/D	73 ppb	51 ppb[2]	80 ppb	N/A	By-product of drinking - water disinfection
Haloacetic Acids	1.5 ppb	28 ppb	22 ppb[2]	60 ppb	N/A	By-product of drinking - water disinfection
Alpha Particles	N/D	4.8 pCi/L	1.99 pCi/L	15 pCi/L	0 pCi/L	Erosion of natural deposites
Beta Particles and Photon Emitters	N/D	9.0 pCi/L	3.64 pCi/L	50 pCi/L[5]	0 pCi/L	Decay of man-made and natural deposits
Radium 226 and 228 (Combined)	N/D	1.07 pCi/L	.43 pCi/L	5 pCi/L	0 pCi/L	Erosion of natural deposits
Uranium	2.6 ppb	6.9 ppb	4.6 ppb	30 ppb	0 ppb	Erosion of natural deposits

(1) 10 ppb as of January 13, 2006
(2) This value is the highest quarterly running annual average reported in 2004.
(3) Chlorine is regulated by maximum residual disinfectant level (MRDL), with the goal stated as an MRDLG.
(4) Action Level: 90 percent of samples must be below this level. One of the sites sampled exceeded the action level for copper.
(5) The actual MCL for beta particles is 4 mrem/year. The EPA considers 50 pCi/L to be the level of concern for beta particles.
(6) Annual testing not required. Data not from 2004.
(7) This data is from entry points to the NLV distribution system (AMSWTF & RMWTF)
(8) By state law, the Southern Nevada Water Authority is required to fluoridate the municipal water supply.

TEST RESULTS Unregulated Substances

SUBSTANCE	MINIMUM	MAXIMUM	AVERAGE
Perchlorate			
- Alfred Merritt Smith WTF	N/D	8.4 ppb	5.3 ppb
- River Mountains WTF	N/D	8.4 ppb	5.6 ppb
Sulfate	260 ppm	260 ppm	260 ppm

TURBIDITY

% SAMPLES LESS THAN 0.3 NTU		MAXIMUM TURBIDITY AND DATE FOUND	POSSBILE SOURCES
AMSWTF	100%	0.091 NTU on May 17, 2004	Soil Run-off
RMWTF	100%	0.094 NTU on Jan 5, 2004	Soil Run-off

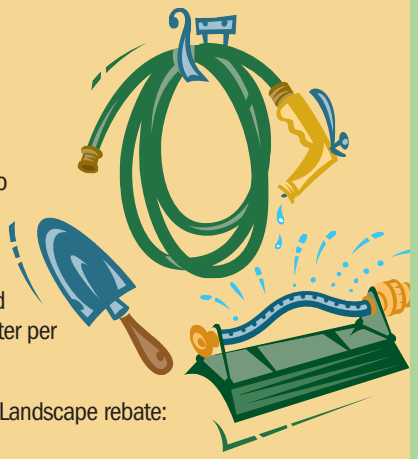
*Turbidity has a Treatment Technique (TT) requirement - 95% of all samples taken after filtration each month must be less than 0.3 NTU. Maximum turbidity cannot exceed 1.0 NTU.

Save Water in the Summer Outdoors

In the summer it is crucial to save water. Follow the suggestions below to help conserve Earth's most natural resource:

- **Put the pool cover on when swim time is over.**
  This helps to prevent water evaporation.
- **Do not leave sprinklers or hoses running all day.**
  They flood the sidewalks and streets causing hundreds of gallons of water to be wasted.
  Set up a sprinkler timer and the water will automatically come on and shut off.
- **Fix sprinklers**
  Adjust sprinklers so they do not water the sidewalks and replace any broken ones.
- **Water the grass in the early morning.**
  This causes more water to soak into the ground and less evaporation.
- **Avoid watering on windy days.**
  The water ends up on sidewalks, streets and in the air.
- **Get rid of weeds**
  Weeds steal water from plants that really need it.
- **Adjust the lawnmower to a higher setting.**
  Set the lawnmower between 2 to 3 inches. Higher grass holds moisture in longer.
- **Use a water smart car wash instead of washing cars at home.**
  The water is recycled and sent to a water treatment facility where it later can be reused. The water flowing into the streets cannot be reused or recovered.
- **Do not use a hose to rinse off driveways and sidewalks.**
  Use a broom to sweep away dirt.

Water Smart Landscape Rebate

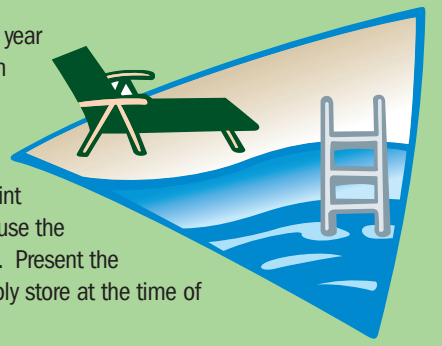


The Water Smart Landscape rebate is available to residential, commercial and multi-family property owners that change grass into xeriscape (zeer'-ih-scape). Xeriscape is a resourceful landscape that eliminates grass in those areas where it is not actually used. The grass is replaced with flowers, plants and trees. Customers can receive $1 per square foot of grass that is removed and replaced with xeriscape. In a year, a total of 55 gallons of water per square foot is saved by trading grass for a water-smart landscape.

The following are steps to follow in order to receive a Water Smart Landscape rebate:

- Visit the SNWA web site at www.snwa.com to enroll
- Do not begin the transformation until a SNWA conservation expert has conducted a pre-conversion visit and approval is given.
- Earn $1 per square foot for the first 50,000 square feet
- Earn $0.50 per square foot for the next 50,001 to 550,000 square feet
- The maximum amount earned per property is $300,000

Pool Cover Rebate



Pool owners can save thousands of dollars each year by using pool covers to reduce water evaporation from their pools.

A rebate is being offered by the SNWA for pool owners who buy water saving pool covers. Pool owners must take a brief survey and then they can print out the instant rebate at www.snwa.com. Be sure to use the address where the pool is located, on the application. Present the coupon and identification at a participating pool supply store at the time of purchase to receive the discount.

Pool owners can receive:
-Half off the price of a solar pool cover up to $50.
-Half off the price of a permanent pool cover up to $200.
-Only one coupon per property
-Must be a customer of an SNWA member agency

For more information on how to download or print the pool cover coupon, call the Conservation Helpline at 258-SAVE (7283), and someone will print the coupon and send it by mail.

Irrigation Clock Rebate

An irrigation clock rebate is currently being offered by the SNWA. Installing a resourceful irrigation clock can save thousands of gallons of water each year. The following are a list of steps to take to get an irrigation clock rebate:

1. Submit a completed interest form or call 258-SAVE.
2. Allow an SNWA representative to conduct a pre-conversion site visit before purchasing a new irrigation clock.
3. Purchase and install a clock that meets the requirements. Turn the old clock in to get the rebate.
4. Call the SNWA representative to verify that the clocks were installed and take any old clocks away.
5. $20 per valve will be given for a digital multi-program clock and $40 per valve for an automated "smart" controller. The total rebate cannot exceed half the cost of the clock.

For more information contact the SNWA at www.snwa.com.

Source Water Assessment Program

The federal Safe Drinking Water Act was amended in 1996 to require states to develop and implement source water assessment programs to analyze existing and potential threats to the quality of public drinking water throughout the state. The 1996 Amendments also required a summary of the findings of the assessment to be included in the public water system's Annual Water Quality Report. The 1996 Amendments specifically required states to delineate areas that are sources for the public drinking water; identify potential contamination sources within the delineated area; assess the public drinking water system's susceptibility to contamination; and to inform the public of the results.

The City of North Las Vegas Utilities Department utilizes six groundwater wells which provide 10% of the water for the public drinking water system. In addition, the North Las Vegas Utilities Department also purchases water from the Southern Nevada Water Authority. The water that is purchased from the Southern Nevada Water Authority, originates from Lake Mead, which makes up the remaining 90% of the drinking water for the system. The public drinking water system is presently in compliance with all state and federal maximum contaminant levels for drinking water. The public water system serves a growing population and maintains a staff of well-trained professionals who operate and maintain the system.

The surface water source assessment includes an analysis of the current water quality data at the water intake in Lake Mead and the vulnerability of the intake to potential contaminating activities located within the Las Vegas Valley watershed. The vulnerability analysis includes the time of travel from potential contaminating activities to the water intake; physical barrier effectiveness of the watershed; the risk associated with the potential contaminating activities; and the evaluation of historical water quality data prior to water treatment. It is noteworthy that this study represents an initial survey of the drinking water intake vulnerability and is based on land use in the Las Vegas Valley watershed rather than an analysis of the drinking water. Even before undergoing treatment, the water quality at the water intake meets all maximum contaminant levels (MCL) for drinking water except for microbiological contaminants that are naturally found in most surface waters.

The vulnerability analysis of land use depicts that the potential contaminating activities with the highest vulnerability rating include: septic systems; golf courses; parks green space; storm channels; gasoline stations; auto repair shops; construction and wastewater treatment plant discharges. Based on water quality data (prior to water treatment) and the results of the vulnerability analysis of potential contaminating activities, the drinking water intake is at a moderate level of risk for volatile organic (VOC); synthetic organic (SOC), microbiological and radiological contaminants and at a high level of risk for inorganic (IOC) contaminants. All of the Las Vegas Valley governmental agencies coordinate their watershed management programs to minimize the vulnerability risk to Lake Mead. The findings of the source water assessment will be used to enhance those programs. It should be noted that treated drinking water delivered by the City has always met all State of Nevada and Safe Drinking Water Act standards.

The City of North Las Vegas' groundwater wells were also assessed for potential vulnerability for VOC, SOC, IOC, radionuclides and microbiological contamination. The City's groundwater wells are considered moderately to highly vulnerable to VOC and SOCs. Vulnerability to radionuclides, IOCs and microbiological contamination is considered low. The City's groundwater supply includes wells drilled into the Las Vegas Valley aquifer, which is approximately 300 to 900 feet below the ground surface. There are potential contaminant sources near or up gradient of City groundwater wells that include: auto repair shops; gasoline stations; other businesses and homeowners. The City has conducted monitoring of all drinking water contaminant groups for many years.

For additional information on the Source Water Assessment Program, please contact the Nevada State Health Division at 775-687-4754.

Important Contact Information:

State Health Division:

Bureau of Health Protection Services . . . . . .(775) 687-4750

EPA Hotline . . . . . .(800) 426-4791

SNWA Conservation 258-SAVE

Xeriscape Conversion 258-SAVE

City of North Las Vegas:

Report Water Waste 633-1216

Water Quality Issues 633-1484

Water Customer Service 633-1484

Español.... 633-1484

Noticia en español

Este informe contiene información muy importante acerca de la calidad del agua. Para recibir una copia en español, por favor comuníquese con la División de Utilidades de los Servicios al Cliente de la Ciudad de North Las Vegas 633-1484.